



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,675	06/14/2006	Jurg Egli	5797	2731
26/936	7590	04/08/2008		
SHOEMAKER AND MATTARE, LTD				
10 POST OFFICE ROAD - SUITE 110				
SILVER SPRING, MD 20910				
EXAMINER				
GARCIA, ERNESTO				
ART UNIT		PAPER NUMBER		
3679				
MAIL DATE		DELIVERY MODE		
04/08/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/568,675

**Applicant(s)**

EGLI ET AL

**Examiner**

ERNESTO GARCIA

**Art Unit**

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) 28-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date 2/17/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Restriction*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 17-27, drawn to corner joint.

Group II, claims 28 and 29, drawn to a connecting part.

Group III, claims 30-32, drawn to a method for producing a corner joint.

The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

an assessment of the prior art with respect to the independent claims provides no unity of invention since the "special technical features", i.e., "a connecting and/or connecting parts being designed in such a way that the mitred hollows sections can be pressed against one another under prestress during the connection operation" common in each of the independent claims is known from patents FR-2,477,443, FR-86,645, and FR-2,729,738. Applicant should note that the lack of unity is based on a posteriori and the special technical features, common to all species, do not define a contribution over the prior.

During a telephone conversation with Charles W. Fallow on March 31, 2008 a provisional election was made oral traverse to prosecute the invention of Group I, claims 17-27. Affirmation of this election must be made by applicant in replying to this

Office action. Claims 28-32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise

require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connecting parts are screwed and/or glued together (claim 22) must be shown or the features canceled from the claim(s). No new matter should be entered. Note that the drawings do not show any adhesive and thus the connecting parts are not glued.

The drawings are objected to because some of the lead lines do not appear joining with the reference characters. The reference characters "a" and "a' " in Figure 3 appear as "9", and character "9" in the label of Figure 9 appears as a "g". The parts 5 and 10 in Figure 1 fail to show the taper at the end since these parts are shown in planar view. The top corner of the hollow sections is incomplete in Figure 4. The vertical line on the inside of the hollow section 9 needs to extend towards the end. Further, the reference characters "31" and "29" in Figure 6 are too close to represent "3129". The hidden line shown in Figure 12 is to be deleted or drawn solid since hidden lines are only used to represent a different position, an axis, or a part hidden from view.

The ends of the broken lines, in Figures 5, 7, 9, and 10, should be designated by Arabic or Roman numerals corresponding to the view number of the sectional view. See 37 CFR 1.84(h)(3) and MPEP 608.02(e).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "5" has been used to designate a connecting part (Figure 2) that does not have an opening starting from the top as compared to Figure 3, a connecting part with an opening starting from the top surface (Figure 3; unreferenced), another connecting part with two narrow central regions 33 (Figures 5-8).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "10" has been used to designate a connecting part with one hollow space and a first configuration of the hole 36 (Figures 1-3), a connecting part with two narrow central regions 33, two hollow spaces 31, and a different configuration of the opening 20 (Figure 5), and another connecting part with a third configuration (Figure 12).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "34" has been used to designate both a recess with a first configuration (Figure 9) and another recess with a second configuration (Figure 12).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "38" in Figure 12.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "36" recited in paragraph [0043].

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.



### ***Specification***

The amended to the specification made on February 17, 2006 is not in compliance with 37 CFR 1.121 since the changes to paragraphs [002], [011], and [012], [030]-[032] have not been shown. These paragraphs should be resubmitted with the changes made.

### ***Claim Objections***

Claims 17, 26, and 27 are objected to because of the following informalities:

regarding claim 17, --the corner joint-- should be inserted before "comprising" in line 1, "in each case" in line 4 should be deleted, --said-- should be inserted before the third occurrence of "connecting" in line 7, --and-- should be inserted before "recesses" in line 5, --the-- should be inserted before "connecting" in line 8, and "in such a way that" in line 8 should be --such that-- since there no structural features being recited that define "the way"; and,

regarding claims 26 and 27, "the connecting part" should be --one of the connecting parts--. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 17, the recitation "a connecting part" in line 6 makes unclear whether this is another connecting part than those recited in line 3 or one of those connecting parts. The recitation "a hollow section" in line 7 makes unclear whether this is another hollow section than those recited in line 2 or one of those recited in line 2. It is unclear where the connecting arrangement is provided according to lines 6-7. The recitation "can be" in line 9 causes doubt whether the section are pressed against one another or not. Further, the recitation "the connection operation" in line 9 lacks proper antecedent basis. Note that the claim does not recite any method steps for there to be any connection operation.

Regarding claim 19, the recitation "a hollow section" in line 2 makes whether this is another hollow section than those recited in claim 17, line 2 or one of those recited in claim 17, line 2.

Regarding claim 24, the recitation "the connecting parts are provided with a nut" in lines 1-2 is misdescriptive and/or inaccurate since only one of the connecting parts is provided with a nut and not both.

Regarding claim 26, the recitation "recesses", in line 2, makes unclear whether these are different recesses than those recited in claim 17, line 5, or the same recesses.

Regarding claims 18, 20-23, 25, and 27, the claims depend from claim 17 and therefore are indefinite.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 20, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Ambonati, FR-2,729,738.

Regarding claim 17, Ambonati discloses, in Figures 1 and 2, a corner joint comprising a corner connector **1** and two mitered hollow sections **3a,3b**. The corner connector **1** comprises at least two connecting parts **1a,1b** each designed with a

fastening arrangement **4**, and recesses **5** or distribution channels. A connecting arrangement **11** is provided. The connecting arrangement **11** or the connecting parts **1a,1b** are designed such that the mitered hollow sections **3a,3b** are pressed against one another under prestress during connection.

Regarding claim 20, the respective hollow sections and the respective connecting parts are screwed or glued together with one another (note that Figure 5 shows adhesive surrounding the parts **1a,1b**).

Regarding claim 22, the connecting parts **1a,1b** are screwed or glued together with one another.

Claims 17, 18, 23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Reith, FR-2,477,443.

Regarding claim 17, Reith discloses, in Figures 1 and 3, a corner joint comprising a corner connector **3** and two mitered hollow sections **1,2**. The corner connector **3** comprises at least two connecting parts **3a,3b** each designed with a fastening arrangement **9**, and recesses (the cavities traversing the connecting parts) or distribution channels. A connecting arrangement **6,7a** is provided. The connecting arrangement **6,7a** or the connecting parts **3a,3b** are designed such that the mitered hollow sections **1,2** are pressed against one another under prestress during connection.

Regarding claim 18, the connecting parts **1a,1b** are provided with a miter. The miter angle of the connecting parts corresponds to that of the hollow sections **1,2**.

Regarding claim 23, the connecting parts **3a,3b** comprise at least one through-hole **7a,7b** running approximately at right angles to the miter.

Regarding claim 25, the hollow section comprises at least one opening (the opening is a result of the punch 19).

Claims 17, 26, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Monticelli, EP-1,333,145.

Regarding claim 17, Reith discloses, in Figures 1 and 3, a corner joint comprising a corner connector **1** and two mitered hollow sections **2p**. The corner connector **1** comprises at least two connecting parts **5** each designed with a fastening arrangement **16**, and recesses (unreferenced but are between the connecting parts in Figure 7) or distribution channels. A connecting arrangement **27** is provided. The connecting arrangement **27** or the connecting parts **5** are designed such that the mitered hollow sections **2p** are pressed against one another under prestress during connection.

Regarding claim 26, the connecting part 5 comprises webs 15 and the recesses (between the parts and adjacent to the webs 15) run in the longitudinal direction in the region of the outer side and in the region of the inner side.

Regarding claim 27, the connecting part comprises a central recess (the channel) in the region of the outer side and correspondingly two webs (the legs) at the side and also at least one web 15 in the region of the inner side.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ambonati, FR-2,729,738, in view of Reith, FR-2,477,443.

Regarding claim 18, Ambonati discloses the connecting parts 1a,1b provided with a miter. However, Ambonati fails to disclose the miter angle of the connecting parts corresponding to that of the hollow sections. Reith teaches, in Figures 1 and 3, the miter angle of connecting parts 3a,3b corresponding to that of hollow sections 1,2 to

provide for similar miters in both the hollow sections and the connecting parts as an alternative configuration for placing the connecting parts perpendicular to each other. Therefore, as taught by Reith, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the miter angle of the connecting parts corresponding to that of the hollow section to make corresponding miters as an alternative configuration for placing the connecting parts perpendicular to each other.

Regarding claim 19, given the modification, at least one of the connecting parts 1a,2b would have been fastened in the hollow section at a distance from the miter surface of the hollow sections.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reith, FR-2,477,443, in view of Durham, 4,943,180.

Regarding claim 21, Reith, as discussed, disclose the hollow section 1,2 being fastened to the connecting part 3a,3b. However, the connection is not made by self-tapping screws. Durham suggests, in column 5, lines 40-44, that hollow sections can be fastened to connecting parts by self-tapping screws as an additional securing structure. Therefore, as taught by Durham, it would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the hollow section to the connecting parts with self-tapping screws to provide for additional securing structure.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reith, FR-2,477,443, in view of Catulle, 3,673,674.

Regarding claim 24, Reith, as discussed, fails to disclose one of the connecting parts is provided with a nut in the region of the through-hole. Catulle teaches, in Figure 5, one connecting part 1' provided with a nut in a region of a through-hole to connect to a screw for bringing connecting parts together. Therefore, as taught by Catulle, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the tapped hole of Reith with the nut, as provided in Catulle, so that the fastener can be fastened thereby brining the two connecting parts together.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30AM-6:00PM. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/E. G./

Examiner, Art Unit 3679

April 7, 2008

/Daniel P. Stodola/  
Supervisory Patent Examiner, Art Unit 3679